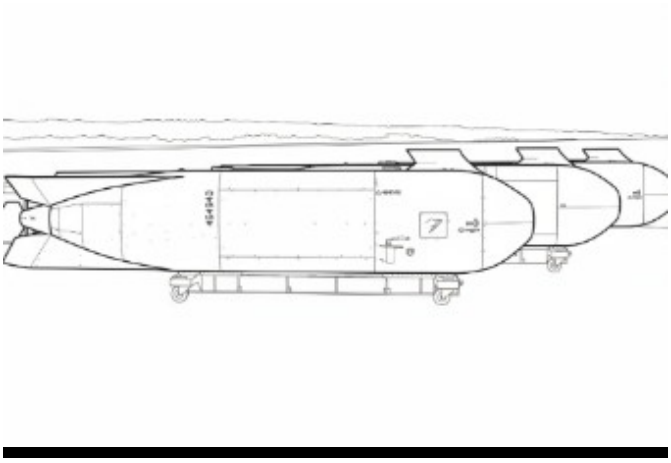
Anduril Ghost Shark (Dive-XL)



SUB-SURFACE — Extra-Large Autonomous UUV

Manufacturer: Anduril Industries, USA / Australia

Designation: Ghost Shark / Dive-XL (Extra-Large Autonomous Undersea Vehicle, XL-AUV)

Role: Multi-mission extra-large UUV — ISR, ASW, mine warfare, autonomous weapons carrier; designed as primary launch platform for Copperhead family swarms

Status: At least one prototype completed. Royal Australian Navy contract ($100M+, 2022) for 3+ vehicles. Anduril building dedicated manufacturing facility in Australia for large-scale production and potential export. Design intended for manufacturing readiness by mid-2025.

Specifications

Length: Classified (estimated >10 m based on XLUUV category)

Displacement: Classified (extra-large class)

Internal Payload: Can carry “dozens” of Copperhead-100s or “multiple” Copperhead-500s internally

Range: Classified (designed for extended autonomous patrols)

Endurance: Extended duration autonomous operations

Navigation: Autonomous via Lattice AI; acoustic and optical subsea networking

Propulsion: Classified

Unit Cost: Undisclosed (estimated $30–50M+ based on contract values and capability class)

Countermeasure Vulnerability Profile

RF Jamming: Not applicable — fully autonomous subsurface.

GPS Denial: Low — designed for extended autonomous navigation without external inputs.

Acoustic Detection: Moderate-High. Extra-large displacement creates detectable acoustic signature, particularly at transit speed. Designed with signature reduction but physically cannot match small UUV stealth.

ASW Prosecution: Conventional ASW assets (maritime patrol aircraft, sonobuoys, attack submarines, surface ASW vessels) are relevant countermeasures for this size class.

Physical Intercept: Anti-submarine weapons (torpedoes, depth charges) could engage this platform.

Cyber/AI: Lattice AI autonomy is sophisticated but creates potential attack surface for adversary AI/ML exploitation or deception.

Cruise Missile Convergence Notes

Ghost Shark is the underwater equivalent of a strategic bomber — a large autonomous platform that penetrates defended space and deploys multiple precision-guided munitions. A single Ghost Shark carrying dozens of Copperhead-100M loitering munitions is functionally an autonomous underwater arsenal ship. This is the ultimate expression of cruise missile convergence in the subsurface domain: the “launch platform” is itself unmanned and autonomous, the “missiles”

(Copperheads) are autonomous UUVs with swarm capability, and the entire kill chain from navigation to target prosecution to engagement operates without human presence in the battlespace. For comparison, a single Ohio-class SSGN carries 154 Tomahawk cruise missiles; a fleet of Ghost Sharks could potentially deploy comparable numbers of Copperhead munitions across a theater — with zero crew at risk. The Anduril Arsenal factory concept for mass-producing these platforms further parallels cruise missile industrial strategy.